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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

10/21/2003

Ronald L Grudziecki Burns Doane Swecker & Mathis LLP P O Box 1404 Alexandria, VA 22313-1404

EXAMINER		
TON, MY TRANG		
ART UNIT	PAPER NUMBER	
2816		

DATE MAILED: 10/21/2003

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/28/2000 026125-068 8153 09/672.803 Jiren Yuan

TITLE OF INVENTION: VERSATILE CHARGE SAMPLING CIRCUITS

APPLN. TYPE SMALL ENTITY **ISSUE FEE PUBLICATION FEE** TOTAL FEE(S) DUE DATE DUE \$30 01/21/2004 nonprovisional

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

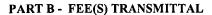
A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.





Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 (703) 746-4000

			or <u>rax</u>	(703) 740-4000		
INSTRUCTIONS: This for appropriate. All further con indicated unless corrected to maintenance fee notification	m should be used for trans- respondence including the F below or directed otherwise	mitting the ISSUE tatent, advance order in Block 1, by (a)	FEE and PUBLI ers and notification specifying a new	CATION FEE (if rec of maintenance fees correspondence address	quired). Blocks 1 through 4 s will be mailed to the current ss; and/or (b) indicating a sep-	hould be completed where correspondence address as arate "FEE ADDRESS" for
	E ADDRESS (Note: Legibly mark-up	with any corrections or us	se Block 1)	Fee(s) Transmittal.	of mailing can only be used f This certificate cannot be used	for any other accompanying
75	90 10/21/2003			have its own certific	onal paper, such as an assignmente of mailing or transmission.	ent or formal drawing, mus
Ronald L Grudzie	ecki			C	Certificate of Mailing or Trans	smission
Burns Doane Swec	ker & Mathis LLP		. *	I hereby certify that States Postal Service	this Fee(s) Transmittal is being with sufficient postage for fire	g deposited with the United st class mail in an envelope
P O Box 1404	212 1404			addressed to the M	lail Stop ISSUE FEE address SPTO, on the date indicated be	above, or being facsimile
Alexandria, VA 22	313-1404				or ro, on the date marcarda per	(Depositor's name)
						(Signature)
	•		•			(Date)
APPLICATION NO.	FILING DATE	E1	RST NAMED INVE	NTOP	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/672,803	09/28/2000			WIOK		
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TITLE OF INVENTION: VI	ERSATILE CHARGE SAM	PLING CIRCUITS		•	,	
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APPLN, TYPE	SMALL ENTITY	ISSUE FEE	; ] p	UBLICATION FEE	TOTAL FEE(8) DUE	DATE DUE
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TON, MY	TRANG	2816		327-091000		
1. Change of correspondence CFR 1.363).	address or indication of "Fe	e Address" (37		the patent front pag		
		,		3 registered patent natively, (2) the name		
Address form PTO/SB/12	nce address (or Change of C 2) attached.	orrespondence	firm (having as	a member a registere	d attorney or 2	
☐ "Fee Address" indication PTO/SB/47; Rev 03-02 on Number is required.	on (or "Fee Address" Indicati or more recent) attached. Use	on form of a Customer		ames of up to 2 regints. If no name is list		
3. ASSIGNEE NAME AND	RESIDENCE DATA TO BI	PRINTED ON TH	IF PATENT (print	or type)	<u> </u>	
PLEASE NOTE: Unless	an assignee is identified belong to the USPTO or is being so	ow, no assignee data ubmitted under sepa	a will appear on thurate cover. Comple	e patent. Inclusion of tion of this form is No	assignee data is only appropri OT a substitute for filing an ass	ate when an assignment has
(A) NAME OF ASSIGNI	SL	(B)	RESIDENCE: (CI	ΓY and STATE OR C	CUNTRY	
Please check the appropriate	assignee category or categor	ies (will not be prin	ted on the patent):	☐ individual ☐	corporation or other private gr	roup entity 🔲 governmen
4a. The following fee(s) are		· · · · · · · · · · · · · · · · · · ·	Payment of Fee(s):		to postanon or other private g	- governmen
☐ Issue Fee			A check in the an	nount of the fee(s) is e	nclosed.	
Publication Fee		C	Payment by credi	t card. Form PTO-203	8 is attached.	
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Director for Patents is reques	sted to apply the Issue Fee an				l issue fee to the application ide	· · · · · · · · · · · · · · · · · · ·
(Authorized Signature)		(Date)	<del></del>			
NOTE: The Issue Fee and	Publication Fee (if require	d) will not be seen	nted from anyone	4		
other than the applicant; a interest as shown by the rec	n registered attorney or age cords of the United States Pat	nt; or the assignee ent and Trademark	or other party in Office.	·		
This collection of informat obtain or retain a benefit b	tion is required by 37 CFR by the public which is to fil is governed by 35 U.S.C. Izes to complete, including gan to the USPTO. Time will the amount of time you rejudy the property of the control of the public business of the control of the control of time you rejudy the control of the cont	1.311. The informa e (and by the USP	tion is required to	] ·	•	
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22313-1450. DO NOT SI SEND TO: Commissioner	END FEES OR COMPLET for Patents, Alexandria, Virg	ED FORMS TO	THIS ADDRESS.			
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#### United States Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/672,803	3 09/28/2000 Jiren Yuan		026125-068	8153
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Ronald L Grudzie	ecki		TON, MY	TRANG
Burns Doane Swec	ker & Mathis LLP			
P O Box 1404			ART UNIT	PAPER NUMBER
Alexandria, VA 22	313-1404	•	2816	
		•	DATE MAIL ED: 10/21/200	2

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



# United States Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/672,803	09/28/2000	Jiren Yuan	026125-068	8153
75	90 10/21/2003		EXAM	INER
Ronald L Grudzie			TON, MY	TRANG
Burns Doane Swecl P O Box 1404	ker & Mathis LLP		ART UNIT	PAPER NUMBER
Alexandria, VA 22	313-1404		2816	
			DATE MAILED: 10/21/200	3

Notice of Fee Increase on October 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on October 1, 2003. See Revision of Patent Fees for Fiscal Year 2004; Final Rule, 68 Fed. Reg. 41532, 41533, 41534 (July 14, 2003).

The current fee schedule is accessible from (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in view of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowance is to be filed on or after October 1, 2003 (or mailed with a certificate of mailing on or after October 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously-paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Effective October 1, 2003, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below.

Section 1.18 Patent post allowance (including issue) fees.

(a) issue fee for issuing each original or reissu	ie patent,
except a design or plant patent:	
By a small entity (Sec. 1.27(a))	\$665.00
By other than a small entity	\$1,330.00

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

4.			14~
	Application No.	Applicant(s)	
Nation of Allowability	09/672,803	YUAN, JIREN	
Notice of Allowability	Examiner	Art Unit	
	My-Trang N. Ton	2816	
	Wy-rrang W. Ton	2010	
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT ROTHER Of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comming the	in this application. If not include nunication will be mailed in due of	ed course. <b>THIS</b>
1. This communication is responsive to <u>Amdt. filed/9/30/03</u> .	,		
2. The allowed claim(s) is/are 32-53 and 58-65.			
3. The drawings filed on 28 September 2000 are accepted by	y the Examiner.		
<ul> <li>4.   Acknowledgment is made of a claim for foreign priority und</li> <li>a)   Acknowledgment is made of a claim for foreign priority und</li> <li>b)   Some* c)   None of the:</li> </ul>	der 35 U.S.C. § 119(a)-(d)	or (f).	
<ol> <li>✓ 1.          \overline{\text{\subset}}         \text{Certified copies of the priority documents have</li> </ol>	e been received.		
2. Certified copies of the priority documents have	e been received in Applicat	ion No	
<ol><li>Copies of the certified copies of the priority do</li></ol>	cuments have been receiv	ed in this national stage applicat	ion from the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
5. Acknowledgment is made of a claim for domestic priority u		• • • • • • • • • • • • • • • • • • • •	
(a) The translation of the foreign language provisional a	• •		
6. Acknowledgment is made of a claim for domestic priority u	nder 35 U.S.C. §§ 120 and	l/or 121.	
Applicant has THREE MONTHS FROM THE "MAILING DATE" or below. Failure to timely comply will result in ABANDONMENT of 7.   A SUBSTITUTE OATH OR DECLARATION must be subminformal patent application (PTO-152) which gives reas	this application. THIS TH nitted. Note the attached E.	REE-MONTH PERIOD IS NOT I XAMINER'S AMENDMENT or N	EXTENDABLE
INFORMAL PATENT APPLICATION (PTO-152) which gives reas	son(s) wny the oath or deci	aration is deficient.	
<ul> <li>8.  CORRECTED DRAWINGS must be submitted.</li> <li>(a)  including changes required by the Notice of Draftsper</li> <li>1)  hereto or 2)  to Paper No</li> <li>(b)  including changes required by the proposed drawing</li> </ul>	_	•	vaminer
(c) ☐ including changes required by the proposed drawing the proposed d			
(o) Including changes required by the attached Examiner	37 mondinent / Comment	or in the Office action of Laper I	
Identifying indicia such as the application number (see 37 CFR 1 each sheet.	.84(c)) should be written on	the drawings in the front (not the	back) of
9. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT FOR T	sit of BIOLOGICAL MAT THE DEPOSIT OF BIOLOG	FERIAL must be submitted. N	ote the
Attachment(s)			
1 ☐ Notice of References Cited (PTO-892)	2☐ Notice	of Informal Patent Application (F	°TO-152)
3 Notice of Draftperson's Patent Drawing Review (PTO-948)	4☐ Intervie	ew Summary (PTO-413), Paper I	
<ul> <li>5 ☐ Information Disclosure Statements (PTO-1449), Paper No</li> <li>7 ☐ Examiner's Comment Regarding Requirement for Deposit</li> </ul>		ner's Amendment/Comment	Massanas
of Biological Material	8⊠ Examir 9∏ Other	ner's Statement of Reasons for A	uiowance
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Application/Control Number: 09/672,803

Art Unit: 2816

#### Reasons for allowance

The following is an examiner's statement of reasons for allowance:

The present invention is drawn to a charge sampling circuit utilizing a control signal generator, an integrator, a sampling switch, first - second charge sampling circuits (a plurality of charge sampling circuits), first – second analog inputs, first – second signal outputs, a common control signal generator, a weighting-and-sampling element, first – second switches, first – second band-pass charge sampling circuits (a chopping circuit, a differential-out amplifier, a clock signal generator, a low pass filter, a low noise amplifier, a local oscillator, a  $\Pi/2$  phase shifter) recited in claims 32-53 and 58-65. None of the prior art disclosed or suggested to show the particular structure and/or the particular operation recited in these claims namely: "the integrator for integrating directly the analog input signal ... of the sampling phase" in combination with "the control signal generator" as recited in claim 32; the combination "the first charge sampling circuit", "the second charge sampling circuit" and "the common control signal generator ... " as recited in claims 36 and 45; the combination of "the control signal generator", "the integrator" and "the weighting-and-sampling element ..." as recited in claims 38 and 47; the combination of "the common control signal generator", "the first band-pass charge sampling circuit", "the second band-pass charge sampling circuit" as recited in claims 42 and 48; the combination of "the common control signal generator" and "the plurality of charge sampling circuits ... when the outputs of said charge sampling circuits are in holding phases" as recited in claim 44; the combination of all the method steps as recited in claims 58 and 61.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ton whose telephone number is (703) 308-4868. The examiner can normally be reached on Monday through Thursday from 7:00 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached on (703) 308-4876. The fax phone number for this Group is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

MY-TRANG NUTON PRIMARY EXAMINER

October 15, 2003